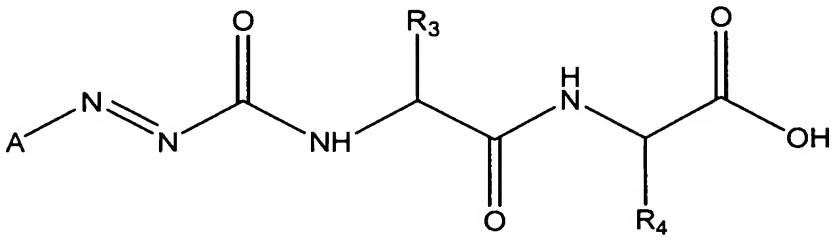
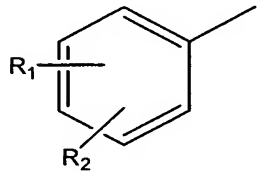
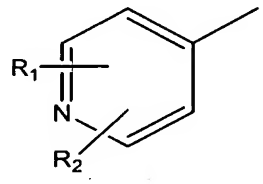
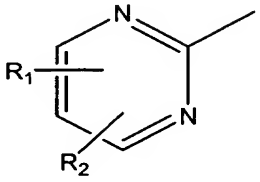
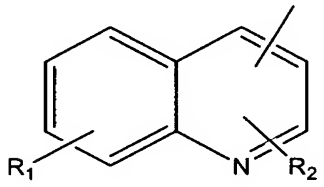
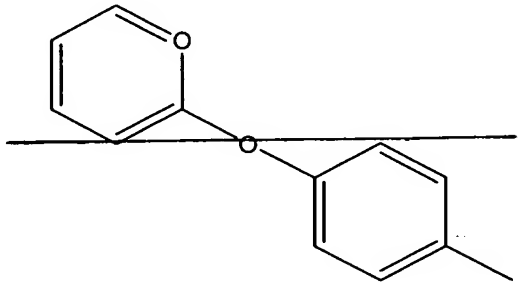
IN THE CLAIMS

1. (currently amended) A compound with the following formula:



wherein:

A =  or  or 

or  or 

R_1 and R_2 may be the same or different and are H, $-CH_3$, $-CH(CH_3)_2$, $-OCH_3$, - Cl, - CF_3, $-OCF_3$, or $-SCH_3$;

R_3 is an amino acid radical hydrolysable by a carboxypeptidase A; and

R_4 is a basic amino acid radical.

2. (previously presented) A compound according to claim 1, wherein:

R_3 is a hydrophobic amino acid radical; and

R_4 is an arginine or lysine radical.

3. (previously presented) A compound according to claim 1 wherein R_1 is H and R_2 is -S-CH_3.

4. (previously presented) A compound according to claim 1 wherein R_3 is selected from the group consisting of:

tyrosine;

phenylalanine;

alanine;

valine;

leucine;

isoleucine; and

phenylglycine.

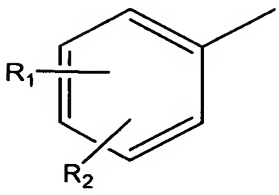
5. (previously presented) A compound according to claim 1 wherein R_3 is phenylalanine.

6. (previously presented) A compound according to claim 1 wherein R_3 is phenylalanine or tyrosine and R_4 is arginine or lysine.

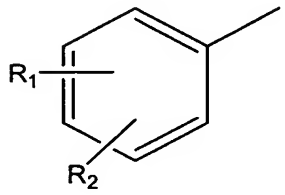
7. (previously presented) A compound according to claim 1 wherein R_3 is tyrosine.

8. (previously presented) A compound according to claim 1, wherein R_1 is selected from the group consisting of: -H and -CH_3, and R_2 is selected from the group consisting of CH_3, O-CH_3 and –S-CH_3.

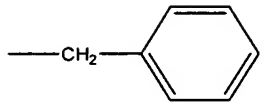
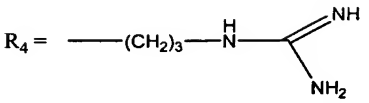
9. (previously presented) A compound according to claim 1, wherein A is:

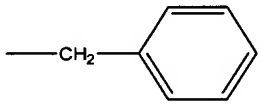
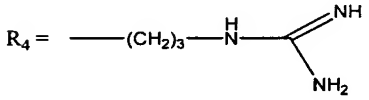


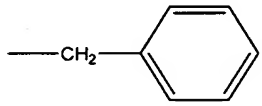
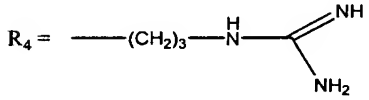
10. (previously presented) A compound according to claim 1 wherein:

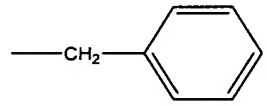
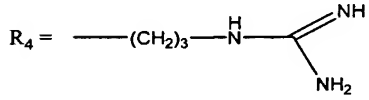
A = 

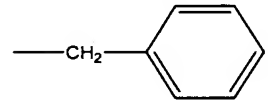
and wherein R_1, R_2, R_3 and R_4 are:

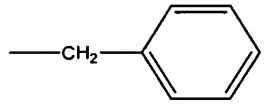
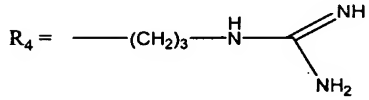
R_1 = $-CH_3$ (2)* R_2 = $-CH_3$ (3)* R_3 =  R_4 = 

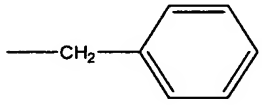
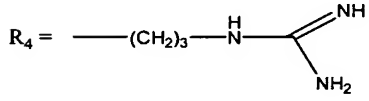
R_1 = $-CH_3$ (2)* R_2 = $-CH_3$ (4)* R_3 =  R_4 = 

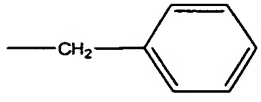
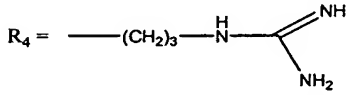
R_1 = $-CH_3$ (2)* R_2 = $-CH_3$ (5)* R_3 =  R_4 = 

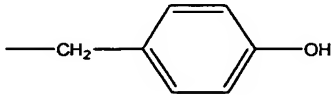
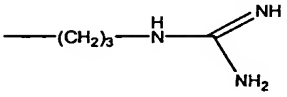
R_1 = $-H$ R_2 =  R_3 =  R_4 = 

R_1 = $-H$ R_2 =  R_3 =  R_4 = $-(CH_2)_4-NH_2$

R_1 = $-Cl$ R_2 = $-CH_3$ R_3 =  R_4 = 

R_1 = $-H$ R_2 = $-O-CF_3$ R_3 =  R_4 = 

R_1 = $-H$ R_2 = $-SCH_3$ R_3 =  R_4 = 

R_1 = $-H$ R_2 = $-SCH_3$ R_3 =  R_4 = 

wherein the numbers designated with an asterix determine the position of the methyl groups on the phenyl radical.

11. (previously presented) A compound according to claim 1, wherein said compound is 4-methylthiophenylazoformyltyrosine arginine.

12. (previously presented) A method for assaying the activity of a carboxypeptidase N or a carboxypeptidase U in a biological sample, in which:

- said sample is brought into contact with a compound of the formula (I) according to claim 1, and with a carboxypeptidase A, under conditions that allow hydrolysis of the sample; and
- the reduction in coloration of the sample containing the substrate of the formula (I) and carboxypeptidase A is measured, resulting from double hydrolysis of the substrate of the formula (I) by the CPN or CPU of the sample and by CPA.

13. (previously presented) A method according to claim 12, wherein R_1 is H and R_2 is $-S-CH_3$.

14. (previously presented) A method according to claim 12, wherein R_4 is an arginine or lysine radical.

15. (previously presented) A method according to claim 12, wherein the substrate is a compound of the formula (I) in which R_3 is selected from the following amino acid radicals:

- tyrosine:
- phenylalanine;
- alanine;
- valine;
- leucine;
- isoleucine; and
- phenylglycine.

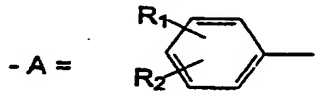
16. (previously presented) A method according to claim 12, wherein R_3 is tyrosine.

17. (previously presented) A method according to claim 12, wherein the substrate is a compound of the formula (I), in which R_3 represents phenylalanine.

18. (previously presented) A method according to claim 12, wherein the substrate is a compound of the formula (I) in which R_3 represents phenylalanine and R_4 represents arginine or lysine.

19. (previously presented) A method according to claim 12, wherein the substrate is a compound of the formula (I) in which R_1 is selected from –H and $–CH_3$, and R_2 is selected from CH_3, $O\text{-}CH_3$ and $–S\text{-}CH_3$.

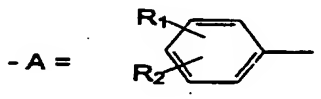
20. (currently amended) A method according to claim 12, wherein the substrate is a compound of the formula (I) in which:



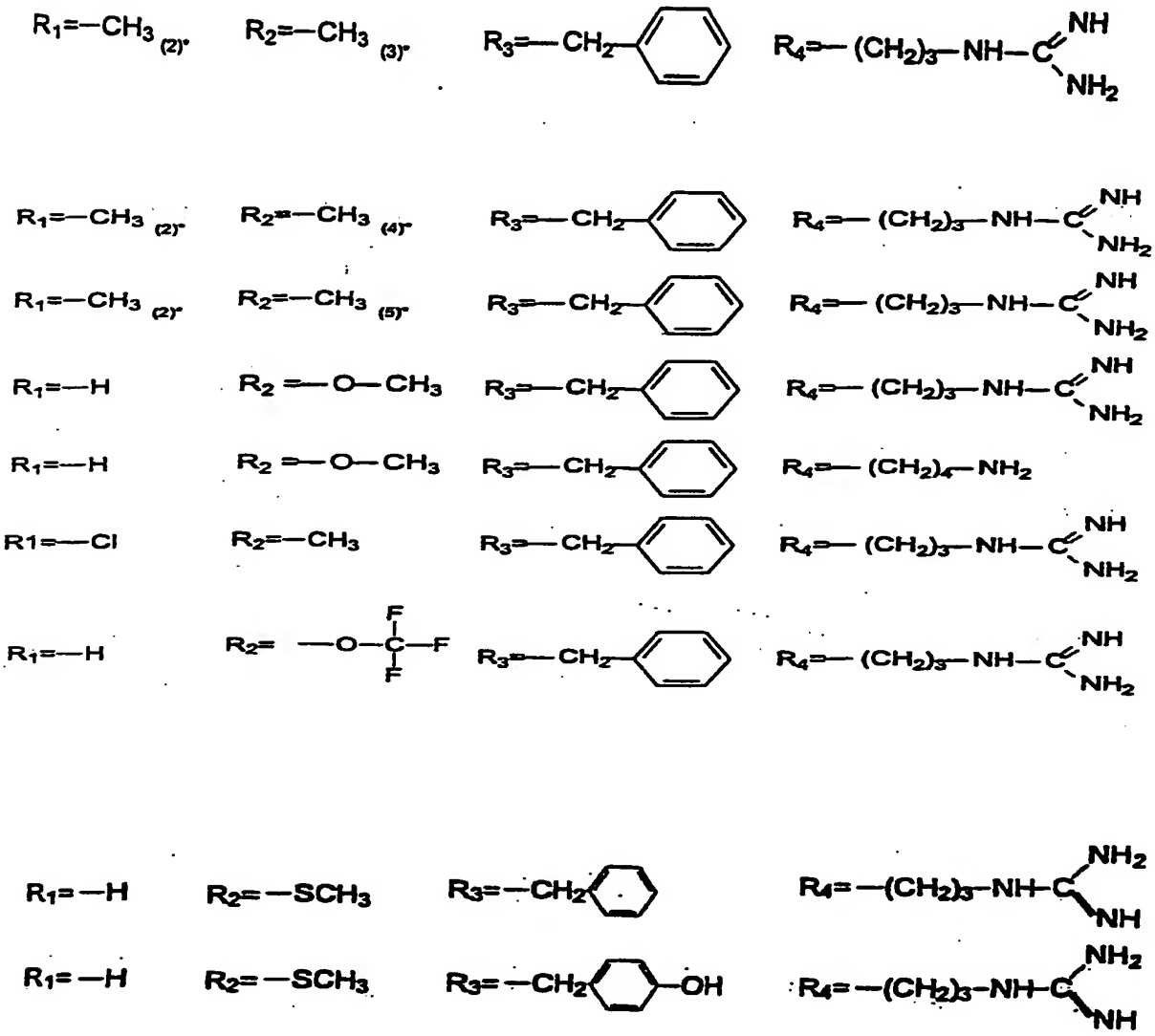
in which:

- R_1, and R_2 = H, $-CH_3$, $-CH(CH_3)_2$, $-OCH_3$, -Cl, $-CF_3$, $-OCF_3$, or $-SCH_3$;
- R_3 = an amino acid radical hydrolysable by a carboxypeptidase A;
- R_4 = a basic amino acid radical.

21. (previously presented) A method according to claim 12,wherein the substrate is a compound of the formula (I) in which:



said compound being selected from the group constituted by the following compounds:



*the numbers in brackets determining the position of the methyl groups on the phenyl radical.

22. (previously presented) A method according to claim 12, in which the compound of the formula (I) is 4-MTPAFYR (4-methylthiophenylazoformyltyrosine arginine).

23. (previously presented) A method according to claim 12, wherein the optical density of the mixture is measured without adding CPA, then after adding CPA.

24. (previously presented) A method according to claim 12, wherein the measured decrease in coloration is compared with values on a calibration curve.

25. (previously presented) A method according to claim 12, wherein the sample is a blood sample.

26. (previously presented) A method according to claim 25, wherein the sample is plasma.

27. (previously presented) A method according to claim 12, wherein the CPA is pancreatic CPA.

28. (previously presented) A method according to claim 12, wherein the test sample is brought into the presence of an activator buffer for the time necessary to obtain activation of the carboxypeptidase U the activity of which is to be measured, then into the presence of a protease serine inhibitor.

29. (previously presented) A method according to claim 28, wherein the substrate of the formula (I) is added at the same time as the activator buffer, or simultaneously or immediately after the serine protease inhibitor.

30. (previously presented) A method according to claim 28, wherein activation is carried out using the thrombin/thrombomodulin complex route.

31. (previously presented) A method for assaying the activity of the constitutional CPN or CPU of a sample and that of the activatable CPN or CPU of the same sample, wherein the hydrolysis activity of the sample on a sample of the formula (I) is compared after bringing the sample into the presence of an activator buffer, if necessary for the time necessary to obtain activation of the carboxypeptidase U the activity of which is to be measured, then into the presence of a protease serine inhibitor, the observed hydrolysis activity being compared with the hydrolysis activity of the sample on a substrate of the formula (I) in the absence of an activator buffer in accordance with claim 12.

32. (previously presented) A method according to claim 21, wherein the carboxypeptidase is a CPU.

33. (previously presented) A method according to claim 32, wherein the CPU is TAFI.

34. (currently amended) A method according to claim 28, wherein the sample is treated in the presence and in the absence of a specific TAFI inhibitor wherein said TAFI inhibitor is added before sample activation.

35. (currently amended) A method according to claim ~~28~~34, wherein the specific TAFI inhibitor is CPI.

36. (original) A method for assaying activated TAFI in a blood sample, comprising the following steps:

a) bringing a first aliquot of the sample into contact with a specific TAFI inhibitor and treating it using the method defined in claim 28;

b) treating a second aliquot of the sample using the method of claim 28, in the absence of specific TAFI inhibitor;

c) measuring the Δ OD between the first and second aliquot, representative of the activity of the activated TAFI in the sample.

37. (previously presented) A method according to claim 36 for differentiating between the activity of constitutional TAFI and that of activatable TAFI in the same sample, characterized in that the hydrolysis activity of a third aliquot of the sample is measured on a substrate of the formula (I) in the absence of a buffer activator.

38. (cancelled)

39. (cancelled)

40. (previously presented) A kit for assaying the activity of a CPN or a CPU in a sample comprising a chromogenic substrate constituted by a compound according to claim 1.

41. (previously presented) A kit for assaying the activity of TAFI in a biological sample, comprising:

a TAFI activator buffer;

carboxypeptidase A;

a substrate of the formula (I) according to claim 1; and

a TAFI inhibitor.